What is claimed is:

1. A method for identifying a one or more prostate disease-related conformer of prostatic acid phosphatase, said method comprising:

contacting a biological fluid sample from a patient with a disease of the prostate with a plurality of conformer-specific antibodies to prostatic acid phosphatase;

detecting substantially specific binding of said antibodies to prostatic acid phosphatase conformers in said sample as compared to a control sample as indicative of the presence of one or more disease-related conformer of prostatic acid phosphatase in said sample.

2. A method for identifying a molecule that inhibits a disease-related conformer of prostatic acid phosphatase, said method comprising:

contacting a molecule that binds to prostatic acid phosphatase with a disease-related conformer of prostatic acid phosphatase ; and

evaluating whether said molecule inhibits said disease-related conformer of prostatic acid phosphatase, whereby a molecule that inhibits said disease related conformer is identified.

3. A method for identifying one or more antibodies that are substantially specific for a conformer of prostatic acid phosphatase, said method comprising:

contacting a plurality of conformers of prostatic acid phosphatase with a plurality of antibodies to conformers of prostatic acid phosphatase ; and

evaluating the specificity of binding of said antibodies to individual members of said plurality of conformers of prostatic acid phosphatase, whereby one or more antibodies that are substantially specific are identified..

4. A method for establishing a prostatic acid phosphatase conformer profile in a population of individuals having a disease of the prostate, said method comprising:

compiling a prostatic acid phosphatase conformer profile of individual members of said population; and

establishing a relationship between prostatic acid phosphatase conformer profiles of said individual members and specific characteristics of said disease of the prostate in said individual members.

5. The method according to claim 4, wherein said specific characteristics of said disease include the response to treatment of said individual members.

6. The method according to claim 4, wherein said specific characteristics of said disease include the diagnoses of said individual members.

7. A method for bioconformatically selecting a treatment to administer to a patient having a disease of the prostate, said method comprising:

determining a prostatic acid phosphatase conformer profile of said patient;

comparing said prostatic acid phosphatase conformer profile of said patient to a prostatic acid phosphatase conformer population profile obtained according to the method of Claim 5; and

selecting as a method of treatment for said patient a method of treatment that was successful for treatment of individual members of said population having a substantially similar conformer profile.

8. A monoclonal antibody which is substantially specific for a conformer of prostatic acid phosphatase.

9. The monoclonal antibody according to Claim 8, wherein said conformer is a disease related conformer.

10. The monoclonal antibody according to Claim 9, wherein said disease is prostate cancer.

11. A cell line which produces a monoclonal antibody according to any one of Claims 8 to 10.

12. A method for screening for the presence of prostate cancer in an

individual, said method comprising:

contacting a fluid or cells of said individual with a monoclonal antibody according to Claim 10 or binding fragment thereof, wherein said monoclonal antibody or binding fragment thereof is labelled with a detectable label; and

detecting said label as indicative of the presence of prostate cancer in said individual.

13. The method according to claim 12, wherein said detectable label is a radionuclide, a fluorescer, an enzyme or a chemiluminscer.

14. The method according to Claim 10, wherein said cells or tissues are obtained from the patient and exposed to the monoclonal antibody in vitro under conditions conducive to immune complex formation.

15. A conformer of prostatic acid phosphatase, wherein said conformer is produced by the method of:

expressing in a fractionated lysate a prostatic acid phosphatase gene comprising a substituted signal sequence coding region, wherein said substituted signal sequence coding region is other than a native signal sequence coding region and is of a different class than said native signal sequence coding region, whereby a prostatic acid phosphatase having an altered conformation is produced.

16. A method for obtaining a conformer of a prostatic acid phosphatase, said method comprising:

expressing in a fractionated lysate a prostatic acid phosphatase gene comprising a substituted signal sequence coding region, wherein said substituted signal sequence coding region is other than a native signal sequence coding region and is of a different class than said native signal sequence coding region, whereby a prostatic acid phosphatase having an altered conformation is produced.

17. The method according to Claim 16, wherein said substituted signal sequence coding region is a mutated signal sequence coding region.

18. A method for preparing antibodies to a conformer obtained according to the method of Claim 16, said method comprising the step of:

immunizing a mammalian host with said conformer under conditions whereby antibodies are produced which bind substantially specifically to said conformer as compared to other conformers of said prostatic acid phosphatase.

19. The method according to Claim 18, further comprising:

after said immunizing step, immortalizing B-lymphocytes from said mammalian host to provide immortalized B-lymphocytes secreting antibodies;

screening said antibodies for substantial specificity for said conformer whereby antibodies with substantial specificity are obtained; and

isolating immortalized B-lymphocytes secreting said antibodies with substantial specificity.

20. The method according to Claim 19, wherein said mammalian host is a mouse, said B-lymphocytes are splenocytes and said immortalizing is with neoplastic cells to produce hybridomas.

21. The method according to Claim 20, wherein said mouse is a prostatic acid phosphatase knockout mouse.

22. A pharmaceutical composition comprising:

a prostate disease-related conformer of prostatic acid phosphatase; and

a pharmaceutically acceptable adjuvant.

23. A method for treating a prostate disease, said method comprising the step of inoculating a host with a composition according to Claim 22.

24. The method according to Claim 23, wherein said prostate disease is prostatic cancer.